Section III

Section III covers control device information. These forms are needed for each application, but only one for each type of device used to control emissions from a process. Pages 15-45 of the Instruction Booklet for Operation Permits have more details on all fields in the forms.

There are eight different control equipment forms. Fill out one form for each piece of control equipment associated with each emissions unit, and attach a diagram. In some cases, it will be difficult to use a specific form for your particular control system. For instance if a facility has a painting operation that is controlled by adsorbers, condensers, and a catalytic incinerator, it would be difficult for the facility to convey a clear picture of how their control system works using the separate control equipment forms. In this case the facility would use the miscellaneous control equipment form to describe their system and will attach diagrams. Attach form 4530-135 for any diagrams or additional information. Be sure the unit identifications match up with forms 4530-102.

The eight control equipment forms are:

4530-110 Miscellaneous Control Equipment (use for any device, or combination of devices not covered by the other control device forms)
4530-111 Condensers (a device used to convert a gas or vapor into a liquid)
4530-112 Adsorbers (a device that removes gaseous components from a process exhaust as they adhere to a solid surface)
4530-113 Catalytic or Thermal Oxidation (device using the process of high temperature combustion to destroy the organic compounds in an exhaust gas)
4530-114 Cyclones or Settling Chambers (device that uses the inertia of particles in a gas stream to mechanically knock the particles down, by making them change direction, and collect them - usually best for heavy or large particles only)
4530-115 Electrostatic Precipitators (uses electrical forces to move particles out of gas stream and onto collector plates)
4530-116 Wet Collection Systems (also called wet scrubbers - contacts particles, whether aerosols or dusts, in a gas stream with a liquid to collect them)
4530-117 Baghouses or Fabric Filters (remove particles from a gas stream by passing the stream through a porous fabric)

Each control equipment form is divided into sections A and B (except the miscellaneous form 4530-110). Fill out section A completely, attaching all required materials. If in section A you are able to provide a control efficiency for the equipment and you are able to provide a manufacturer's guarantee or stack test results that documents the control efficiency, you do not need to fill out section B. When filling out section B, most of the operating parameters, such as air-to-cloth ratio in a baghouse, can be obtained from the equipment manufacturer. Other parameters will need to have a device installed so that they can be measured. For instance, a flow meter may need to be installed to measure the liquid flow rate through a wet collector.

Your trade association may be able to help with questions you have on equipment that is frequently used in your industry. Contact them for assistance:

(links to trade associations)